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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/030,715	01/14/2002	Yoshinobu Kiso	46/225	8223	
20736	7590 03/25/2005		EXAMINER		
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700			WANG, SH	WANG, SHENGJUN	
	N, DC 20036-3307		ART UNIT	PAPER NUMBER	
			1617		

DATE MAILED: 03/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Application No.	Annlicant(a)				
Application its.	Applicant(s)				
10/030,715	KISO ET AL.				
Examiner	Art Unit				
Shengjun Wang	1617				
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Responsive to communication(s) filed on <u>24 November 2004</u> . This action is <b>FINAL</b> . 2b) This action is non-final.					
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10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.					
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4) Interview Su	mmary (PTO-413)				
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## **DETAILED ACTION**

Receipt of applicants' amendemnts and remarks submitted November 24, 2004 is acknowledged.

## Claim Rejection 35 U.S.C. 103

- 1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 2. Claims 9, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Asami et al. (EP 0,770,385, IDS MR).
- 3. Asami et al. teaches an anti-stress composition comprising astaxanthin and the method of using the same for treating stress. See the abstract and the claims, page 5, lines 41-55. Asami et al. further discloses that it is known in the art that stress cause somatic disorder as well as neurosis and depression. Stress destroys the ability of maintain homeostasis by the body. Conventional treatment of stress includes anti-anxiety agents and sleeping pills. See page 2, lines 9-14. Note, by definition, stress is reactions of the body to forces of a deleterious nature, infections, and various abnormal states that tend to disturb its normal physiologic equilibrium (homeostasis). (see Stedman's Medical dictionary). Normal circadian rhythm is part of homeostasis, and disturbance of circadian rhythm is a type of stress. The amounts of astaxanthin to be administered is 0.1-10g/day and preferred 0.1-1 g/day. See, page 6, lines 7-11.
- 4. Asami et al. does not teach expressly to employ the astaxanthin containing composition for treating patient having disturbance of circadian rhythm.

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However, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to employ the astaxanthin containing composition for treating patient having disturbance of circadian rhythm because disturbance of circadian rhythm is a well-known type of stress. One of ordinary skill in the art would have reasonably expected. that the astaxanthin-containing composition to be beneficial for patient having disturbance of circadian rhythm because the composition is known for anti-stressing. Furthermore, a composition useful for treating stress would have been reasonably expected to be useful for alleviating symptoms caused by stress, such as reduced homeostasis, or sleep disorder. The recitation "suppressing degradation of in vivo melatonin" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951). As to the limitation "to suppress degradation of in vivo melatonin" note, the instant claims are directed to effecting a biochemical pathway with an old and well known compounds. The argument that such claims are not directed to the old and well known ultimate utility (anti-stress) for the compounds, e.g., astaxanthin, are not probative. It is well settled patent law that mode of action elucidation does not impart patentable moment to otherwise old and obvious subject matter. Applicant's attention is directed to In re Swinehart, (169 USPQ 226 at 229) where the Court of Customs and Patent Appeals stated "is elementary that the mere recitation of a newly discovered function or property, inherently possessed by thing in the prior

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art, does not cause a claim drawn to those things to distinguish over the prior art." In the instant invention, the claims are directed to the ultimate utility set forth in the prior art, albeit distanced by various biochemical intermediates. The ultimate utility for the claimed compounds is old and well known rendering the claimed subject matter obvious to the skilled artisan. It would follow therefore that the instant claims are properly rejected under 35 USC 103. Further, the optimization of a result effective parameter, e.g., effective amount of a therapeutical agents, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215.

## Response to the Arguments

Applicants' amendemnts and remarks submitted November 24, 2004 have been fully considered.

Claims 8 and 10-11 are allowable for reasons set forth in the prior office action. Claims 9 and 12-13 are rejected as set forth above. As stated above, it is well settled patent law that mode of action elucidation does not impart patentable moment to otherwise old and obvious subject matter. Applicant's attention is directed to In re Swinehart, (169 USPQ 226 at 229) where the Court of Customs and Patent Appeals stated "is elementary that the mere recitation of a newly discovered function or property, inherently possessed by thing in the prior art, does not cause a claim drawn to those things to distinguish over the prior art."

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

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A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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SHENGJUNWANG PRIMARY EXAMINER

Shengjun Wang Primary Examiner Art Unit 1617